

```
<110> Shi, Yigong
       Compositions And Methods For Regulating Apoptosis
<120>
<130> PU-0031 (01-1739-1)
<140> 09/965,967
<141> 2001-09-28
<150> 60/236,574
<151> 2000-09-29
<150> 60/256,830
<151> 2000-12-20
<160> 30
<170> PatentIn version 3.1
<210> 1
<211>
       4
<212>
      PRT
<213> Homo sapiens
<400> 1
Ala Val Pro Ile
<210>
       2
<211>
<212> PRT
<213> Drosophila melanogaster
<400> 2
Ala Val Ala Phe
<210> 3
<211>
<212> PRT
<213> Drosophila melanogaster
<400> 3
Ala Ile Ala Tyr
<210> 4
<211>
<212> PRT
<213> Drosophila melanogaster
<400> 4
Ala Val Pro Phe
1
<210> 5
<211> 4
<212> PRT
<213> Homo sapiens
<400> 5
Ala Thr Pro Phe
```

```
1
<210> 6
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic Peptide
<400> 6
Ala Val Pro Tyr
<210> 7
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic Peptide
<400> 7
Ala Thr Pro Val
<210> 8
<211> 7
<212> PRT
<213> Homo sapiens
<400> 8
Ala Val Pro Ile Ala Gln Lys
<210> 9
<211> 7
<212> PRT
<213> Drosophila melanogaster
<400> 9
Ala Val Ala Phe Tyr Ile Pro 1
<210> 10
<211> 7
<212> PRT
<213> Drosophila melanogaster
<400> 10
Ala Ile Ala Tyr Phe Leu Pro
                5
<210> 11
<211> 7
<212> PRT
<213> Drosophila melanogaster
<400> 11
Ala Val Pro Phe Tyr Leu Pro 5
```

```
<210> 12
<211> 7
<212> PRT
<213> Homo sapiens
<400> 12
Ala Thr Pro Phe Gln Glu Gly
<210> 13
<211> 7
<212> PRT
<213> Mus musculus
<400> 13
Ala Val Pro Tyr Gln Glu Gly
<210> 14
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic Peptide
<400> 14
Ala Thr Pro Val Phe Ser Gly
<210> 15
<211> 10
<212> PRT
<213> Drosophila melanogaster
<400> 15
Ala Val Pro Phe Tyr Leu Pro Glu Gly Gly
<210> 16
<211> 10
<212> PRT
<213> Drosophila melanogaster
<400> 16
Ala Ile Ala Tyr Phe Ile Pro Asp Gln Ala
                    5
<210> 17
<211> 10
<212> PRT
<213> Drosophila melanogaster
<400> 17
Ala Val Ala Phe Tyr Ile Pro Asp Gln Ala
<210> 18
<211> 10
```

<212> PRT

<213> Homo sapiens

<400> 18

Ala Val Pro Ile Ala Gln Lys Ser Glu Pro

<210> 19 <211> 109 <212> PRT

<213> Drosophila melanogaster

<400> 19

Lys Asn Asn Ile Asn Lys Thr Arg Met Asn Asp Leu Asn Arg Glu Glu

Thr Arg Leu Lys Thr Phe Thr Asp Trp Pro Leu Asp Trp Leu Asp Lys 20 30

Arg Gln Leu Ala Gln Thr Gly Met Tyr Phe Thr His Ala Gly Asp Lys

Val Lys Cys Phe Phe Cys Gly Val Glu Ile Gly Cys Trp Glu Gln Glu 50 60

Asp Gln Pro Val Pro Glu His Gln Arg Trp Ser Pro Asn Cys Pro Leu 65 70 75 80

Leu Arg Arg Arg Thr Thr Asn Asn Val Pro Ile Asn Ala Glu Ala Leu

Asp Arg Ile Leu Pro Pro Ile Ser Tyr Asp Ile Cys Gly

<210> 20

<211> 107 <212> PRT

<213> Homo sapiens

<400> 20

Pro Asn Ser Thr Asn Leu Pro Arg Asn Pro Ser Met Ala Asp Tyr Glu

Ala Arg Ile Phe Thr Phe Gly Thr Trp Ile Tyr Ser Val Asn Lys Glu 20 25 30

Gln Leu Ala Arg Ala Gly Phe Tyr Ala Leu Gly Glu Gly Asp Lys Val $35 \\ 40 \\ 45$ 

Lys Cys Phe His Cys Gly Gly Gly Leu Thr Asp Trp Lys Pro Ser Glu 50 60

Asp Pro Trp Glu Gln His Ala Lys Trp Tyr Pro Gly Cys Lys Tyr Leu

Leu Glu Gln Lys Gly Gln Glu Tyr Ile Asn Asn Ile His Leu Thr His

Ser Leu Glu Glu Cys Leu Val Arg Thr Thr Glu

<210> 21

<211> 110 <212> PRT

<213> Homo sapiens

<400> 21

Ile Ser Asp Thr Ile Tyr Pro Arg Asn Pro Ala Met Tyr Cys Glu Glu

Ala Arg Leu Lys Ser Phe Gln Asn Trp Pro Asp Tyr Ala His Leu Thr

Pro Arg Glu Leu Ala Ser Ala Gly Leu Tyr Tyr Thr Gly Ile Gly Asp

Gln Val Gln Cys Phe Cys Cys Gly Gly Lys Leu Lys Asn Trp Glu Pro

Cys Asp Arg Ala Trp Ser Glu His Arg Arg His Phe Pro Asn Cys Phe 65 75 80

Phe Val Leu Gly Arg Asn Leu Asn Ile Arg Ser Glu Ser Asp Ala Val

Ser Ser Asp Arg Asn Phe Pro Asn Ser Thr Asn Leu Pro Arg 105

<210> 22

<211> 110 <212> PRT

<213> Homo sapiens

<400> 22

Thr Cys Val Pro Ala Asp Ile Asn Lys Glu Glu Glu Phe Val Glu Glu

Phe Asn Arg Leu Lys Thr Phe Ala Asn Phe Pro Ser Gly Ser Pro Val

Ser Ala Ser Thr Leu Ala Arg Ala Gly Phe Leu Tyr Thr Gly Glu Gly

Asp Thr Val Arg Cys Phe Ser Cys His Ala Ala Val Asp Arg Trp Gln

Tyr Gly Asp Ser Ala Val Gly Arg His Arg Lys Val Ser Pro Asn Cys 65 70 75 80

Arg Phe Ile Asn Gly Phe Tyr Leu Glu Asn Ser Ala Thr Gln Ser Thr

Asn Ser Gly Ile Gln Asn Gly Gln Tyr Lys Val Glu Asn Tyr Page 5

105 100 110

<210> 23 <211> 98 <212> PRT

<213> Homo sapiens

<400> 23

Met Gly Ala Pro Thr Leu Pro Pro Ala Trp Gln Pro Phe Leu Lys Asp 1  $\phantom{\bigg|}$  5  $\phantom{\bigg|}$  10  $\phantom{\bigg|}$  15

His Arg Ile Ser Thr Phe Lys Asn Trp Pro Phe Leu Glu Gly Cys Ala

Cys Thr Pro Glu Arg Met Ala Glu Ala Gly Phe Ile His Cys Pro Thr

Glu Asn Glu Pro Asp Leu Ala Gln Cys Phe Phe Cys Phe Lys Glu Leu

Glu Gly Trp Glu Pro Asp Asp Pro Ile Glu Glu His Lys Lys His

Ser Ser Gly Cys Ala Phe Leu Ser Val Lys Lys Gln Phe Glu Glu Leu 90

Thr Leu

<210> 24

<211> 4 <212> PRT <213> Homo sapiens

<400> 24

Met Val Pro Ile

<210> 25 <211> 13 <212> PRT <213> Drosophila melanogaster

Met Thr Ser Ala Val Pro Ile Ala Gln Lys Ser Glu Pro 1  $\phantom{-}5\phantom{+}$ 

<210> 26 <211> 11 <212> PRT

<213> Drosophila melanogaster

<400> 26

Met Ala Val Pro Phe Tyr Leu Pro Glu Gly Gly 1 5 10

<210> 27 <211> 11

```
<212> PRT
<213> Drosophila melanogaster
<400> 27
Met Ala Val Ala Phe Tyr Ile Pro Asp Gln Ala
<210> 28
<211> 20
<211> 11
<212> PRT
<213> Drosophila melanogaster
<400> 28
Met Ala Ile Ala Tyr Phe Ile Pro Asp Gln Ala 1 5 10
<210> 29
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic Peptide
<220>
<221> misc feature
<222> (2)..(2)
<223> X is V, T, or I
<220>
<221> misc_feature
<222> (3)..(3)
<223> X is P or A
<220>
<221> misc_feature
<222> (4)..(4)
<223> X is F, Y, I, or V
<400> 29
Ala Xaa Xaa Xaa
<210> 30
<211> 109
<212> PRT
<213> Drosophila melanogaster
<400> 30
Ala Ser Gly Asn Tyr Phe Pro Gln Tyr Pro Glu Tyr Ala Ile Glu Thr
Ala Arg Leu Arg Thr Phe Glu Ala Trp Pro Arg Asn Leu Lys Gln Lys
Pro His Gln Leu Ala Glu Ala Gly Phe Phe Tyr Thr Gly Val Gly Asp
Arg Val Arg Cys Phe Ser Cys Gly Gly Gly Leu Met Asp Trp Asn Asp
```

Page 7

Asn Asp Glu Pro Trp Glu Gln His Ala Leu Trp Leu Ser Gln Cys Arg 65 70 75 80

Phe Val Lys Leu Met Lys Gly Gln Leu Tyr Ile Asp Thr Val Ala Ala 85 90 95